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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,264	11/12/2003	Sun Zhao You	A3-323 US	6865
23683	7590	06/17/2004	EXAMINER	
MOLEX INCORPORATED 2222 WELLINGTON COURT LISLE, IL 60532			HAMMOND, BRIGGITTE R	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N . 10/706,264	Applicant(s) YOU, SUN ZHAO	
	Examiner Briggilte R. Hammond	Art Unit 2833	

-- Th MAILING DATE of this communication app ars on th cover she t with the correspondenc address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-3 and 5-9 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

Figures 7 and 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu 5,879,169 in view of Schnell et al. 6,231,394. Wu discloses an electronic card connector 10, comprising an insulating housing 12 having a top and a bottom; a plurality of terminal passageways 14 penetrating from the top to the bottom of the insulating housing, a plurality of conductive terminals 16 received in the corresponding terminal passageways 14, and each conductive terminal including: a base portion 18 provided with at least one interference body 20; a soldering tail 40 extending from one end of the base portion; a connecting portion bending and extending from the other end of the base portion, (not numbered, see fig. 2); and a contact portion 28 extending from the connecting portion; wherein the bottom of the insulating housing has a plurality of accepting recesses (near 42 in fig. 1). Wu does not disclose the recesses being for receiving the soldering tail nor at least one side of inner walls of the accepting recess having an interference portion for holding the soldering tail. However, Schnell et al. disclose an insulated housing 12 having recesses 30 for receiving soldering tail 16.6 and at least one side of inner walls of the accepting recess having an interference portion (not shown, see col. 4, lines 40-45) for holding the soldering tail. Therefore, it would have been obvious to one of ordinary skill in the art to modify the card connector of Wu by having the recesses being for receiving the soldering tail and at least one side of inner walls of the accepting recess having an interference portion for holding the soldering tail as taught by Schnell et al.

Regarding claims 2 and 3, since the housing body corresponds to the shape of the contacts, see col. 4, lines 46-50, the interference portion is shaped as semi-

cylinder, and horizontally extends from the inner wall of the accepting recess, the middle of the accepting recess is provided with an elevated platform for being pressed against by the soldering tail.

Regarding claim 5, Schell et al. discloses substantially U-shaped slots formed between two neighboring accepting recesses on the bottom of the insulating housing.

Regarding claim 6, Wu discloses at least one wing 20 (right side of terminal) vertically extending from the base of the conductive terminal, and at least one holding hole 22 is formed on the bottom of the insulating housing beside the terminal passageway for holding the at least one wing.

Regarding claim 7, Wu discloses the interference body 20 (left side of terminal) formed in the base of the conductive terminal horizontally extending outward from the base, whose width enables the conductive terminal to be precisely held in the terminal passageway 14.

Regarding claim 8, Schell et al. disclose the contact 16 having a resistance member 16.1 shaped as a traverse rod extending from a front of the contact portion, a blockade member 32 formed inside a terminal passageway near the top of the insulating housing, and the blockade member precisely presses against the resistance member whenever the contact portion is pushed into the corresponding terminal passageway, as shown in fig. 1. Therefore it would have been obvious to modify the connector of Wu to include the contact having a resistance member shaped as a traverse rod extending from a front of the contact portion, a blockade member formed inside a terminal passageway near the top of the insulating housing, and the blockade

member precisely presses against the resistance member whenever the contact portion is pushed into the corresponding terminal passageway as taught by Schnell et al.

Regarding claim 9, the conductive terminal of Wu is substantially U-shaped.

### ***Allowable Subject Matter***

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: patentability resides, at least in part, in the elevated platform being lower than the interference portion, inducing the soldering tail and the bottom of the insulating housing to be on the same plane when the conductive terminal is installed into the terminal passageway, in combination with the other limitations of the base claim.

### ***Conclusion***

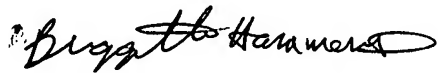
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Klien et al. 6,659,784, Sako et al. 4,969,844, Matsumoto 6,398,598 and Bricaud et al 6,447,338 were cited for similar card connectors and/or contact terminals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Monday-Thursday and Alternate Fridays from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brigitte R. Hammond

A handwritten signature in black ink, appearing to read "Brigitte Hammond", with a stylized flourish at the end.

June 11, 2004